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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

NGUYEN, THANH T

ART UNIT	PAPER NUMBER
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2143

DATE MAILED: 05/22/2003

2

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/575,330

Applicant(s)

HARDWICK ET AL.

Examiner

Tammy T Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE (3) MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 May 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____



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Detailed Office Action

1. Claims 1-24 are presented for examination.

Election/Restrictions

2. Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I Claims 1-24 are drawn to a system for use with a client computer and server computer system communicatively linked to a network system, classified in **class 709, subclass 203**.
- II. Claims 27-30, are drawn to a method for transmitting data from a server computer system to a client computer system, classified in **class 709, subclass 232**.
- III Claims 25, 26, are drawn to a method for establishing duplex communication between a browser application running under control of a browser program and server application running on a server computer system over network, classified in **class 709, subclass 238**

3. Inventions I, II, III are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. In the instant case, invention I has separate utility such as a system for use with a client computer and server computer system communicatively linked to a network system,

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classified in a *different Class/ Subclass*. Invention II has separate utility such as a method for transmitting data from a server computer system to a client computer system, classified in a *different Class/Subclass*. Invention III has separate utility such as a method for establishing duplex communication between a browser application running under control of a browser program and server application running on a server computer system over network, classified in a *different Class/Subclass*. See MPEP § 806.05(d).

4. The inventions are distinct, each from the other because of the following reasons:

(a) These inventions have acquired a separate status in the art as shown by their different classifications.

(b) The search required for each Group is different and not co-extensive for examination purposes.

For example, the searches for the three inventions would not be co-extensive because these Groups would require different searches on PTO's classification class and subclass as following:

The Group I search (Claims 1-24) would require use of search **Class 709, subclass 203** (not require for invention II, III).

The Group II search (Claims 31-44, and 91-92) would require use of search **Class 709, subclass 232** (not require for the invention II, III).

The Group III search (Claims 68-78, 86, and 89) would require use of search **Class 709, subclass 238** (not require for invention I, II). For the reasons given above restriction for examination purposes as indicated is proper.

5. During a telephone conversation with Applicants' Representative, Mr. Abramonte, Frank

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(Reg. No. 38, 006), on May 8, 2003 a provisional election was made without traverse to prosecute the invention of Group I, claims 1-24. Affirmation of this election must be made by applicant in replying to this Office action. **Claims 25 - 30 are withdrawn from further consideration as being directed to a non-elected invention.** See 37 CFR 1.142(b), as being drawn to a non-elected invention and MPEP § 821.03.

6. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bittinger et al., (hereinafter Bittinger) U.S. Patent No. 5,878,213.

9. As to claim 1, Bittinger teaches the inventions as claimed, including a duplex transport

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system for use with a client computer system and a server computer system, the client computer system and the server computer system communicatively linked to a network system, the duplex transport system comprising:

a browser program configured to run on the client computer system, the browser program having built-in features associated with communication protocols used by the duplex transport system (Fig.2, col.19, lines 25-67, col.20, lines 7-36, col.1, lines 24-46);

one or more browser applications configured to run on the client computer system under control of the browser program (Fig.2, Web browser 10);

one or more server applications configured to run on the server computer system (Fig.2, Web Server 20, col.2, lines 22-55);

a client component configured to run as one or more instances on the client computer system, each instance of the client component being communicatively linked to one of the browser applications (col.18, line 61 to col.19, line 13, col.13, lines 17-35, and col.7, line 60 to col.8, line 16);

a server component configured to run as one or more instances on the server computer system, each instance of the server component being communicatively linked to one of the server applications (col.20, lines 735); and

the client component and the server component configured such that each of the one or more instances of the client component is associated with one of the one or more instances of the server component to form a session for each association, each session having a session identifier (col.25, lines 22-56, and col.27, lines 1-16) and one or more (col.21, lines 29-65) sub-sessions designated or more data pipes (Socket function as pipe), each data pipe being a sub-session of a

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particular session, having a pipe identifier (col.7, line 60 to col.8, line 16, col.25, lines 22-56, and col. 27, lines 1-16), and configured to provide two independent data paths of duplex data traffic between the browser application communicatively linked to the instance of the client component associated with the particular session and the server application communicatively linked to the instance of the server component associated with the particular session (col.3, lines 40-65, and col.20, lines 7-26). It would have been obvious to one of ordinary skill in the Data Processing art at the time of the invention was made that Bittinger implicitly discloses sockets equivalent to pipes that disclose in the applicants' specification. A person of the ordinary skill in the art would have recognized that Bittinger performed the same function in substantially the same way to reach substantially the same result.

10. As to claim 2, Bittinger teaches the inventions as claimed, wherein some of the built-in features of the browser program are associated with either Hypertext Transfer Protocol (HTTP), Hypertext Transfer Protocol Secure (HTTPS), Internet Protocol Secure (IPSEC), Secure Sockets Layer/Transport Layer Security (SSL/TLS), other request-response protocols, and/or the same and/or other protocols approved by communication standards organizations including but not limited to such standards organizations as the International Telecommunications Union (ITU) including such committees as the Telecommunications, and the Telecommunications Standards Sector committee, and the Internet Architecture Board including such task forces as the Internet Engineering Task Force and the Internet Research Task Force (col.6, lines 52 to col.7, line 8).

11. As to claim 3, Bittinger teaches the inventions as claimed, wherein the client component and the server component is further configured such that the one or more data pipes of a session based on an association between an instance of the client component and an instance of the

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server component are configured to, provide data paths of duplex data traffic comprising messages, each message containing one of the pipe identifiers (col.7, line 60 to col.8, line 16, col.25, lines 22-56, and col.27, lines 1-16).

12. As to claim 4, Bittinger teaches the inventions as claimed, wherein the client component and the server component is further configured such that the one or more data pipes of a session based on an association between an instance of the client component and an instance of the server component are configured to provide data paths of duplex data traffic comprising messages that each contain one of the pipe identifiers identifying the data pipe and a pipe sequence number, the pipe sequence number identifying an order of the messages in the duplex data traffic associated with the data pipe (col.19, lines 25-65).

13. As to claim 5, Bittinger teaches the inventions as claimed, wherein the client component and the server component is further configured such that the one or more data pipes of a session based on an association between an instance of the client component and an instance of the server component are assigned the pipe identifier corresponding to the data pipe used by that message (col.25, lines 22-56, and col.27, lines 1-16).

14. As to claim 6, Bittinger teaches the inventions as claimed, wherein the client component and the server component is further configured such that the one or more data pipes of a session based on an association between an instance of the client component and an instance of the server component utilize the communication protocols associated with the built-in features of the browser program for the duplex data traffic (col.19, lines 14-25, and col.19, lines 25-65).

15. As to claim 7, Bittinger teaches the inventions as claimed, wherein the built-in features of

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the browser program involve one or more of the following: uniform resource locators (URLs), firewall/proxy navigation under Hypertext Transfer Protocol (HTTP), proxy configuration of browser program, HTTP authentication, Transmission Control Protocol/Internet Protocol (TCP/IP), Secure Sockets Layer/Transport Layer Security (SSL/TLS), HTTP Secure (HTTPS), Internet Protocol Secure (IPSEC), and access to client certificates for use with security protocols (col.6, lines 52-67, col.13, lines 18-47).

16. As to claim 8, Bittinger teaches the inventions as claimed, including a duplex transport system for use with a client computer system having a client application controlling a utility application, the client computer system communicatively linked to a network system and a server computer system having a server application, the server computer system communicatively linked to the network system, the duplex transport system comprising:

a client component configured to run as an instance on the client computer system, the instance of the client component being communicatively linked to one of the utility applications (Fig.2, Web browser 10, computer 5);

a server component configured to run as an instance on the server computer system, the instance of the server component being communicatively linked to one of the server applications (Fig.2, Web server 20, col.20, lines 7-35, and col.2, lines 2-55); and

the client component and the server component configured such that the instance of the client component is associated with the instance of the server component in an association to form a session (col.13, lines 18-35), the session having a session identifier and a sub-session designated as a data pipe (Fig.11, 65A-65B, 64A-64B function as pipe), the data pipe having a pipe identifier (col.12, lines 1-16, and col.25, lines 21-55) and configured to provide two independent

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data paths of duplex data traffic (col.19, lines 25-65) between the utility application communicatively linked to the instance of the client component and the server application communicatively linked to the instance of the server component (col.3, lines 40-65, and col.20, lines 7-26). It would have been obvious to one of ordinary skill in the Data Processing art at the time of the invention was made that Bittinger implicitly discloses sockets equivalent to pipes that disclose in the applicants' specification. A person of the ordinary skill in the art would have recognized that Bittinger performed the same function in substantially the same way to reach substantially the same result.

17. As to claim 9, Bittinger teaches the inventions as claimed, wherein the client computer and the server component are further configured such that the duplex data traffic of the data pipe of the session formed from the association between the instance of the client component and the instance of the server component utilizes Hypertext Transfer Protocol (HTTP), Hypertext Transfer Protocol Secure (HTTPS), Internet Protocol Secure (IPSEC), Secure Sockets Layer/Transport Layer Security (SSL/TLS), other request-response protocols, and/or the same and/or other protocols approved by communication standards organizations including but not limited to such standards organizations as the International Telecommunications Union (ITU) including such committees as the Telecommunications, and the Telecommunications Standards Sector committee, and the Internet Architecture Board including such task forces as the Internet Engineering Task Force and the Internet Research Task Force (col.6, lines 52 to col.7, line 8).

18. As to claim 10, Bittinger teaches the inventions as claimed, wherein the client computer and the server component are further configured such that the data pipe of the session formed from the association between the instance of the client component and the instance of the server

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component provides the data paths of duplex data traffic comprising messages that each contain the pipe identifier (col.7, line 60 to col.8, line 16, col.25, lines 22-56, and col.27, lines 1-16).

19. As to claim 11, Bittinger teaches the inventions as claimed, wherein the client computer and the server component are further configured such that the data pipe of the session formed from the association between the instance of the client component and the instance of the server component data pipe is configured to provide data paths of duplex data traffic comprising messages that each contain the pipe identifier identifying the data pipe and a pipe sequence number, the pipe sequence number identifying an order of the messages in the duplex data traffic associated with the data pipe (col.19, lines 25-65).

20. As to claim 12, Bittinger teaches the inventions as claimed, wherein the client computer and the server component are further configured such that the session formed from the association between the instance of the client component and the instance of the server component further comprises a second data pipe being a second sub-session of the session, the second data pipe having a pipe identifier, configured to provide two additional independent data paths of a second duplex data traffic between the utility application and the server application, and being a secondary data pipe (col.19, lines 14-25, and col.19, lines 25-65).

21. As to claim 13, Bittinger teaches the inventions as claimed, wherein the client component is configured to run with a browser program (col.18, line 60 to col.19, line 25).

22. As to claim 14, Bittinger teaches the inventions as claimed, wherein the client component and the server component are further configured to run as second instances where the second instances of the client component and server component are associated in an association to form

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a second session having a session identifier (col.17, line 60 to col.18, line 16, and col.27, lines 1-26).

23. As to claim 15, Bittinger teaches the inventions as claimed, including a client computer system for use with a duplex transport system and a server computer system having a server application, the client computer system and the server computer system having a server component communicatively linked to a network system, the client computer system comprising:

- a client computer (Fig.2, client computer 5);

- a browser program configured to run on the client computer (Fig.2, web browser 10), the browser program having built-in features associated with communication protocols used by the duplex transport system (col.19, lines 25-67, col.20, lines 7-36, and col.1, lines 24-46);

- one or more browser applications configured to run on the client computer under control of the browser program (Fig.2, web browser 10);

- a client component configured to run as one or more instances on the client computer, each instance of the client component being communicatively linked to one of the browser applications (col.18, line 61 to col.19, line 13, col.13, lines 17-35, and col.7, line 60 to col.8, line 16), each instance of the client component configured to be associated with an instance of the server component to form a session with a session identifier (col.25, lines 22-56, and col.27, lines 1-16), the client component further configured to be associated with one or more data pipes (Fig.11, 65A-65B, 64A-64B function as pipe), each data pipe being a subsession of one of the sessions formed between instances of the client component and instances of the server component, each data pipe having a pipe identifier (col.25, lines 22-56, and col.27, lines 1-16), each data pipe configured to provide two independent data paths of duplex data traffic between

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the browser application communicatively linked to the instance of the client component associated with the session of the data pipe and the server application communicatively linked to the instance of the server component associated with the session of the data pipe (col.3, lines 40-65, and col.20, lines 7-26) It would have been obvious to one of ordinary skill in the Data Processing art at the time of the invention was made that Bittinger implicitly discloses sockets equivalent to pipes that disclose in the applicants' specification. A person of the ordinary skill in the art would have recognized that Bittinger performed the same function in substantially the same way to reach substantially the same result.

24. As to claim 16, Bittinger teaches the inventions as claimed, wherein some of the built-in features of the browser program are associated with either Hypertext Transfer Protocol (HTTP), Hypertext Transfer Protocol Secure (HTTPS), Internet Protocol Secure (IPSEC), Secure Sockets Layer/Transport Layer Security (SSL/TLS), other request-response protocols, and/or the same and/or other protocols approved by communication standards organizations including but not limited to such standards organizations as the International Telecommunications Union (ITU) including such committees as the Telecommunications, and the Telecommunications Standards Sector committee, and the Internet Architecture Board including such task forces as the Internet Engineering Task Force and the Internet Research Task Force (col.6, lines 52 to col.7, line 8).

25. As to claim 17, Bittinger teaches the inventions as claimed, wherein the client component is further configured to form an association between an instance of the client component and an instance of the server component to form a session that has more than one data pipe, each data pipe having duplex data traffic of messages, each message being assigned a pipe identifier corresponding to the data pipe used by each message (col.25, lines 22-56, and col.27, lines 1-16).

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26. As to claim 18, Bittinger teaches the inventions as claimed, wherein the client component is further configured to form an association between the instance of the client component and an instance of the server component to form a session having one or more data pipes that utilize the communication protocols associated with the built-in features of the browser program for duplex data traffic (col.19, lines 14-25, and col.19, lines 25-65).

27. As to claim 19, Bittinger teaches the inventions as claimed, wherein the built-in features of the browser program involve one or more of the following: uniform resource locators (URLs), firewall/proxy navigation under Hypertext Transfer Protocol (HTTP), proxy configuration of the browser program, HTTP authentication, Transmission Control Protocol/Internet Protocol (TCP/IP), Secure Sockets Layer/Transport Layer Security (SSL/TLS), HTTP Secure (HTTPS), Internet Protocol Secure (IPSEC), and access to client certificates for use with security protocols (col.6, lines 52-67, col.13, lines 18-47).

28. As to claim 20, Bittinger teaches the inventions as claimed, including server computer system for use with a duplex transport system and a client computer system, the client computer system having a client component and a browser application and the server computer system communicatively linked to a network system, the server computer system comprising:

- a server computer (Fig.2, server computer 6);

- one or more server applications configured to run on the server computer (Fig.2, web server 20);

- a server component configured to run as one or more instances on the server computer, each instance of the server component being communicatively linked to one of the server applications, each instance of the server component configured to be associated with an instance of the client

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component to form a session with a session identifier (col.25, lines 22-56, and col.27, lines 1-16), the server component further configured to be associated with one or more data pipes (Fig.11, 65A-65B, 64A-64B function as pipe) each data pipe being a subsession of the session, each data pipe having a pipe identifier (col.25, lines 22-56, and col.27, lines 1-16), each data pipe configured to provide two independent data paths of duplex data traffic between the browser application communicatively linked to the instance of the client component associated with the session of the data pipe and the server application communicatively linked to the instance of the server component associated with the session of the data pipe (col.3, lines 40-65, and col.20, lines 7-26). It would have been obvious to one of ordinary skill in the Data Processing art at the time of the invention was made that Bittinger implicitly discloses sockets equivalent to pipes that disclose in the applicants' specification. A person of the ordinary skill in the art would have recognized that Bittinger performed the same function in substantially the same way to reach substantially the same result.

29. As to claim 21, Bittinger teaches the inventions as claimed, wherein some of the built-in features of the browser program are associated with either Hypertext Transfer Protocol (HTTP), Hypertext Transfer Protocol Secure (HTTPS), Internet Protocol Secure (IPSEC), Secure Sockets Layer/Transport Layer Security (SSL/TLS), other request-response protocols, and/or the same and/or other protocols approved by communication standards organizations . including but not limited to such standards organizations as the International Telecommunications Union (ITU) including such committees as the Telecommunications, and the Telecommunications Standards Sector committee, and the Internet Architecture Board including such task forces as the Internet Engineering Task Force and the Internet Research Task Force (col.6, lines 52 to col.7, line 8).

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30. As to claim 22, Bittinger teaches the inventions as claimed, wherein the server component is further configured to be associated with the client component in an association to form a session that has more than one data pipes having duplex data traffic where each message of the duplex data traffic is assigned the pipe identifier corresponding to the data pipe used by each message (col.12, lines 22-55, and col.27, lines 1-16).

31. As to claim 23, Bittinger teaches the inventions as claimed, wherein the server component is further configured to be associated with the client component in an association to form a session that has one or more data pipes that utilize the communication protocols associated with the built-in features of the browser program for the duplex data traffic (col.25, lines 22-56, and col.27, lines 1-16).

32. As to claim 24 Bittinger teaches the inventions as claimed, wherein the built-in features of the browser program involve one or more of the following: uniform resource locators (URLs), firewall/proxy navigation under Hypertext Transfer Protocol (HTTP), proxy configuration of the browser program, HTTP authentication, Transmission Control Protocol/Internet Protocol (TCP/IP), Secure Sockets Layer/Transport Layer Security (SSL/TLS), HTTP Secure (HTTPS), Internet Protocol Secure (IPSEC), and access to client certificates for use with security protocols (col.6, lines 52-67, col.13, lines 18-47).

Conclusion

33. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiries concerning this communication or earlier communications from the

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examiner should be directed to **Tammy T. Nguyen** who may be reached via telephone at **(703) 305-7982**.

The examiner can normally be reached Monday through Friday between 8:00 a.m. and 4:30 p.m. eastern standard time. If you need to send the Examiner, a facsimile transmission regarding After Final issues, please send it to **(703) 746-7238**. If you need to send an Official facsimile transmission, please send it to **(703) 746-7239**. If you would like to send a Non-Official (draft) facsimile transmission the fax is **(703) 746-7240**. If attempts to reach the examiner by telephone are unsuccessful, the Examiner's Supervisor, **David Wiley**, may be reached at **(703) 308-5221**.

Any response to this office action should be mailed to:

Director of Patents and Trademarks Washington, D.C. 20231.

Moreover, hand-delivered responses should be delivered to the Receptionist, located on the **fourth floor of Crystal Park 11, 2121 Crystal Drive Arlington, Virginia.**

Tammy T Nguyen


DAVID WILEY
SUPERVISORY PATENT EXAMINER
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